

CLAIM AMENDMENTS

1. (Previously presented) A filter assembly comprising a plurality of longitudinal elongated filter elements that are suitable for separating fluid from solid particles, having an open upper end sealed into a sealing device and a closed bottom end attached to a filter support that is mounted on a filter grid, in which the filter grid has a plurality of grid elements together forming the filter grid, wherein at least a portion of the cross-section of the grid elements between two adjacent filter elements is pointiform.
2. (Previously presented) The filter assembly of claim 1, wherein the cross-section of the grid element is pointiform over at least the total portion of the grid element between the filter elements.
3. (Previously presented) The filter assembly of claim 2, wherein the point of the cross-section of the grid element has an angle $\tau \leq 2*(90-\alpha)$, and the angles τ_1 and τ_2 of each of the edges of said point with a perpendicular line are $\leq (90-\alpha)$, wherein α stands for the angle of repose of the solid particles.
4. (Previously presented) The filter assembly of claim 3, wherein the filter elements are at least substantially vertically mounted.
5. (Previously presented) The filter assembly of claim 4, wherein the surface of the grid element is smoothened.
6. (Previously presented) The filter assembly of claim 5, wherein the filter support is a longitudinal elongated extension that fits into a recess provided in the filter element.
7. (Previously presented) The filter assembly of claim 6, wherein the filter support is placed on a point of intersection of at least two grid elements.
8. (Previously presented) The filter assembly of claim 7, wherein the ratio of the total area of the horizontal cross-section at the maximum thickness of the grid elements : the total area of open parts of the filter grid is less than 1:1.5.

9. (Previously presented) The filter assembly of claim 8, wherein the ratio of the total area of the horizontal cross-section at the maximum thickness of the grid elements : the total area of open parts of the filter grid is between 1:3.5 and 1:5.

10. (Currently Amended) ~~The~~^A filter grid for accommodating a plurality of filter elements that are suitable for separating fluid from solid particles, said filter grid ~~comprises~~: comprising filter supports, having at least a portion of the cross-section of the grid elements between two adjacent filter elements that is pointiform.

11. (Previously presented) A filter vessel comprising:
a longitudinal vessel body having upper and lower ends;
a master tube sheet separating the area of the vessel body containing fluid and the area containing fluid and solid particles;
at least one inlet port in said vessel body for admitting fluid to be filtered from solid particles;
outlet ports in said vessel for discharging the fluid and for discharging the solid particles; and
at least one filter assembly comprising a plurality of longitudinal elongated filter elements that are suitable for separating fluid from solid particles, having an open upper end sealed into a sealing device and a closed bottom end attached to a filter support that is mounted on a filter grid, in which the filter grid has a plurality of grid elements together forming the filter grid, wherein at least a portion of the cross-section of the grid elements between two adjacent filter elements is pointiform.

12. (New) The filter assembly of claim 1, wherein the point of the cross-section of the grid element has an angle $\tau \leq 2^*(90-\alpha)$, and the angles τ_1 and τ_2 of each of the edges of said point with a perpendicular line are $\leq(90-\alpha)$, wherein α stands for the angle of repose of the solid particles.

13. (New) The filter assembly of claim 1, wherein the filter elements are at least substantially vertically mounted.

14. (New) The filter assembly of claim 1, wherein the surface of the grid element is smoothened.

15. (New) The filter assembly of claim 1, wherein the filter support is a longitudinal elongated extension that fits into a recess provided in the filter element.

16. (New) The filter assembly of claim 1, wherein the filter support is placed on a point of intersection of at least two grid elements.

17. (New) The filter assembly of claim 1, wherein the ratio of the total area of the horizontal cross-section at the maximum thickness of the grid elements : the total area of open parts of the filter grid is less than 1:1.5.

18. (New) The filter assembly of claim 1, wherein the ratio of the total area of the horizontal cross-section at the maximum thickness of the grid elements : the total area of open parts of the filter grid is between 1:3.5 and 1:5.

19. (New) The filter grid of claim 10, wherein the filter supports are longitudinal elongated extensions that fit into a recess provided in the filter elements.